HEXAVALENT CHROMIUM (Cr VI) BY COLORIMETRIC METHOD **SM 3500-Cr B-2009 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 3020.

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
Hexavalent Chromium					
1.For Chromium VI determination, were sample pH's adjusted to pH 9.3-9.7 using ammonium sulfate buffer solution, cooled to ≤ 6°C, and analyzed within 28 days? (*pH preservation unnecessary if samples are analyzed for Chromium VI within 24 hours.)*	40 CFR 136.3 Table II Footnotes 18, 20				
2. Were Chromium VI samples never diluted by more than 10% by sodium sulfate buffer?	3500-Cr B 4.b				
Chromium					
3. If total chromium was determined, was the sample acidified with HNO_3 upon collection to a pH < 2 and held for no longer than 6 months?	3500-Cr A 3 Intro 40 CFR 136.3 Table II				
4. If dissolved total chromium was determined, was the sample acidified to a pH < 2 with HNO_3 upon collection only after filtration through a 0.45 µm filter?	3500-Cr A 3 Intro				
5. For determination of total chromium, were samples digested prior to analysis?	40 CFR 136 Table IB				
Procedure					
6. Was spectrophotometer used at 530 or 540 nm, or did filter photometer have a maximum transmittance at 530 or 540 nm?	3500-Cr B 2 a				

Notes/Comments:

HEXAVALENT CHROMIUM (Cr VI) BY COLORIMETRIC METHOD **SM 3500-Cr B-2009 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 3020.

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
7. Was glassware acid washed, never exposed to chromic acid?	3500-Cr B 2 b				
8. Was pH meter standardized and calibrated according the manufacturer's instructions?	3500-Cr B 2 c				
9. Were standards carried through the same preparations as samples?	3500-Cr B 4 a				
10. Were samples brought to room temperature prior to analysis?	3500-Cr B 4 c				
11.Were 0.25 mL (5 drops) of H3PO4 added to each sample?	3500-Cr B 4 c				
12. Was sample pH adjusted to 2.0 ± 0.5 with 0.2 N H2SO4?	3500-Cr B 4 c				
13. Was 2.0 mL diphenylcarbazide solution added to 100-mL sample?	3500-Cr B 4 c				
14. Were samples allowed to stand 5 to 10 minutes for full color development prior to reading?	3500-Cr B 4 c				
15. Were sample absorbances corrected by subtraction of a blank carried through the method?	3500-Cr B 4 c				
16. If solutions were turbid prior to addition of diphenylcarbazide, were absorbances readings taken before adding dephenylcarbazide and the readings subtracted from the readings of final colored solution?	3500-Cr B 4 c				

Notes/Comments:

HEXAVALENT CHROMIUM (Cr VI) BY COLORIMETRIC METHOD **SM 3500-Cr B-2009 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 3020.